

ABSTRACT OF THE DISCLOSURE

An apparatus for leaching zinc concentrates which comprises: a pressure vessel for charging therein a solution containing at least free sulfuric acid and iron ions, a stirrer which is disposed in the pressure vessel, an oxygen gas supply pipe that extends into the pressure vessel from the outside of the pressure vessel, the oxygen gas supply pipe having an oxygen gas inlet port which opens below the stirrer, and a discharge pipe through which an iron-containing, acidic solution or a slurry that results from the reaction of said solution containing at least free sulfuric acid and iron ions is discharged to the outside of the pressure vessel, the discharge pipe having a drain port which is open in a lower part of said pressure vessel.